

Work Order ID 149933 - 2

149933

Page 1

Monday, August 29, 2016 9:50:14 AM

Item ID: D135-692-011

Accept

N900040100

Setup Start

NS1

Revision ID:

Item Name: EC135 Bearpaws

Stop

NS2

Start Date: 9/12/2016 Start Qty: 10.00

10

Cust Item ID:

Required Date: 10/14/2016 Req'd Qty: 10.00

10

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run

Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

D3049

B

DSI 9750

A

IIN-D135-692

B

AUG 29 2016

100

Document Control

0.00

100

DC

Memo

0.00

Doc.Control -USB or Paperwork

Photocopy bluefile and create labels per PPP D135-692-011 CHG003

5x 1 28 9-30

SEP 26 2016

150

Pick Kit

0.00

150

Packaging

Memo

0.00

Packaging

10 R

AUG 29 2016

DAS 9-6-16

Work Order ID 149933

149933

Monday, August 29, 2016 9:50:14 AM

Accept

N900040100

Setup Start *NS1*

Stop *NS2*

Item ID: D135-692-011

Revision ID:

Item Name: EC135 Bearpaws

Start Date: 9/12/2016 Start Qty: 10.00

10

Cust Item ID:

Required Date: 10/14/2016 Req'd Qty: 10.00

10

Customer:

Reference:

Run Start *NR1*

Stop *NR2*

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160	QC4- 100% Inspect kits for completeness	0.00				5x	28 9-89		SEP 2 6 2016
160									
QC	Memo	0.05							
Quality Control									
170	Packaging	0.00				5x	28 9-89		SEP 2 6 2016
170									
Packaging	Memo	0.00							
Packaging	Identify and pack for shipping as per PPP D135-692-011								
	Location: _____								
	PPP Rev: _____								
180	QC21- Final Inspection - Work Order Release	0.00							
180									
QC	Memo	0.17							
Quality Control									

DAS
21
9-89

SEP 2 6 2016

DAS
21
9-89

SEP 2 6 2016

Monday, August 29, 2016 9:50:19 AM

Page 1

1 499.33

D135-692-011

~~Start Date: 9/12/2016~~

~~Required Date: 10/11/2016~~

Required Qty: 10.00

[illegible]

2

pc

DAS
6
3-30

D2182R

066

Loc Code

2.5

31.5208

350

207.0000

8

80

PC

040

D2274

Loc Code

12

12

11

11

184

184

0.0000

2

20

D3049-1

28
9-89

AUG 29 2016

2-2-68

Picklist Print

Monday, August 29, 2016 9:50:19 AM

Page 2

Work Order ID: 149933

149933

Parent Item: D135-692-011

D135-692-011

Parent Item Name: EC135 Bearpaws

Start Date: 9/12/2016

Required Date: 10/14/2016

Start Qty: 10.00

Required Qty: 10.00

D2529
Washer
D2529

Manufactured No

160 Each

288.0000

8 80

**

X24

PC

DAS

Location

Loc Qty

Loc Code

ST008

264

108881

12

147569

252

140554

24

ST009

160 Each

0.0000

4 40

**

150853 X25

PC

DAS

D2519
Clamp
AN4-13A
Bolt
D2519
AN4-13A

Manufactured No

Purchased No

Each

1,214.000

80

**

PC

DAS

Location

Loc Qty

Loc Code

FG

20

122808

20

GA

19

m134634

19

over003

1039

m134943

39

m135464

500

m135470

500

ST343

136

m134852

36

m135390

100

Aug 29 2016

Picklist Print

Monday, August 29, 2016 9:50:19 AM

Work Order ID: 149933

149933

Parent Item: D135-692-011

D135-692-011

Parent Item Name: EC155 Bearpaws

Start Date: 9/12/2016

Required Date: 10/14/2016

Start Qty: 10.00

Required Qty: 10.00

MS21042L4

Purchased

No

160

Each

2,161.000

8

80

MS21042L4

Nut

**

pl

DAS
6
9-89

28
9-89

Location

Loc Qty

Loc Code

FP001

51

m133363

51

GA

424

m133769

116

m135058

308

ST3003

25

m134955

25

ST303

1661

m133769

12

m134055

24

m135297

625

m135470

1000

80

NAS1149D0463J

Purchased

No

160

Each

2,486.000

8

80

NAS1149D0463J

Washer

**

PC

DAS
6
9-89

28
9-89

Location

Loc Qty

Loc Code

GA

240

M132035

15

M134508

32

M135056

193

ST260a

1000

M135407

1000

ST263

1234

M134039

24

M135390

1210

ST2663

12

M134039

12

80

AUG 29 2016

QS100-M245 x4

135603 = 40

DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS IIN-D135-692 REV. B AND
INSTRUCTIONS FOR CONTINUED AIRWORTHINESS ICA-D135-692 REV. 1
REF. FAA STC: SR01042SE
REF. TCCA LETTER OF ACCEPTANCE: 120S-GA-08-52
REF. EASA STC: 10038103

1.0 PURPOSE

The purpose of this Dart Service Instruction is to allow customers with D135-692-011 Bearpaws at CHG 002 and earlier to modify the D3049-1 Bearpaw to relocate the aft most D2519 Clamp and D2182B060 Rubber Cushion by up to 2.5" (63.5 mm) further forward to avoid interference with the snow ski provisions on the OEM skidtubes. At CHG 003 and later, the D3049-1 Bearpaw is supplied with the provisions to relocate the clamp and cushion.

2.0 INSTALLATION PROCEDURE

2.1 Jack up the aircraft. Ensure the skidtubes are serviceable.

NOTE: For D135-692-011 Bearpaw Kits at CHG 002 and prior, drill Qty 2x Ø0.26" (6.60 mm) holes through the D3049-1 Bearpaws as indicated in Figure 1 of this Dart Service Instruction. Counter bore the holes on the underside of the bearpaws Ø0.94" to Ø1.00" (23.87 mm to 25.40 mm) and to a depth of 0.40" (10.16 mm).

2.2 If installing the D135-692-011 Bearpaw Kit with the D135-692-041 Wearplate Kit, align the D3719-041 Wearplate under the D3049-1 Bearpaw as shown in Figure 1 of this service instruction and install the bearpaw and wearplate onto the skidtube using the hardware shown in Figure 2, 3 and 4 of this service instruction.

2.3 If installing the D135-692-011 Bearpaw Kit without the D135-692-041 Wearplate Kit, align the D3049-1 Bearpaw as shown in Figure 1 of this service instruction and install the bearpaw onto the skidtube using the hardware shown in Figure 5 of this service instruction.

NOTE: The bearpaws should be installed over the skidtube wearshoes. The D3049-1 Bearpaw may be relieved to clear skidtube wearshoe mounting screws provided the relief leaves 0.375" (9.53 mm) thickness.

CAUTION: The torque on the nuts should be limited to 20 in-lb (2.3 Nm).

2.6 Lower the aircraft.

2.7 Update the aircraft log book as applicable to indicate installation of the DSI 9750-011 Install Modification, D135-692-011 Bearpaws and D135-692-041 Wearplate Kit.

SHUT COPY
RETURN TO
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UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 149933
SLD

AUG 15 2016

A	NEW ISSUE		ML	18.06.01
REV.	DESCRIPTION		BY	DATE
DESIGN	ML	DART AEROSPACE USA, INC. EUGENE, OR		
DRAWN	ML			
CHECKED	4	DRAWING NO.	REV. A	
MFG. APPR.	N/A	DSI 9750	SHEET 1 OF 5	
APPROVED	[Signature]	TITLE	SCALE	
DE APPR.	[Signature]	INSTALL MODIFICATION	NTS	
DATE	16.06.01		COPYRIGHT © 2016 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	

3.0 PARTS LIST

The DSI 9750-011 Clamp Relocation Kit can be procured from Dart to install D135-692-041 on D135-692-011 at CHG 002 and earlier, and includes hardware for Qty 2x skid tubes.

Qty -011	Part Number	Description
X	DSI 9750-011	Clamp Relocation Kit
8	D2529	WASHER
4	AN4-11A	BOLT
4	MS21042L4	NUT

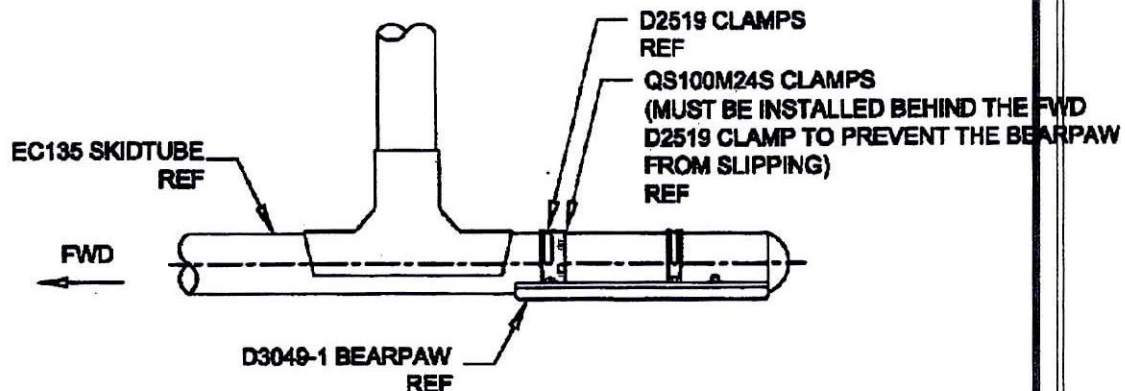
The parts list for IIN-D135-692 and ICA-D135-692 is amended as follows:

Qty -011	Qty -041	Part Number	Description
X		D135-692-011	BEARPAW INSTALLATION
	X	D135-692-041	WEARPLATE KIT
4		D2182B060	RUBBER CUSHION
8		D2274	RADIUS BLOCK
2		D3049-1	BEARPAW
8	8	D2529	WASHER
4		D2519	CLAMP
	2	D3719-041	WEARPLATE
	4	AN4-11A	BOLT
8	8	AN4-13A	BOLT
8	12	MS21042L4	NUT (OR MS21042-4)
8	8	NAS1149D0463J	WASHER
4		QS100M24S	CLAMP

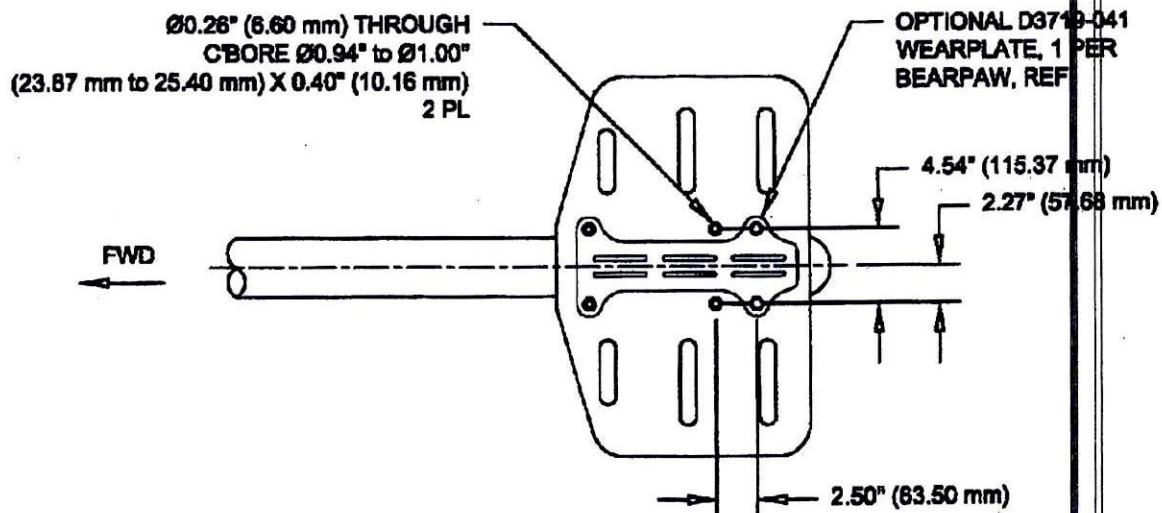
4.0 WEIGHT AND BALANCE

There is a negligible weight and balance change associated with this modification.

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MFG. APPR.	N/A	DSI 9750	SHEET 2 OF 5
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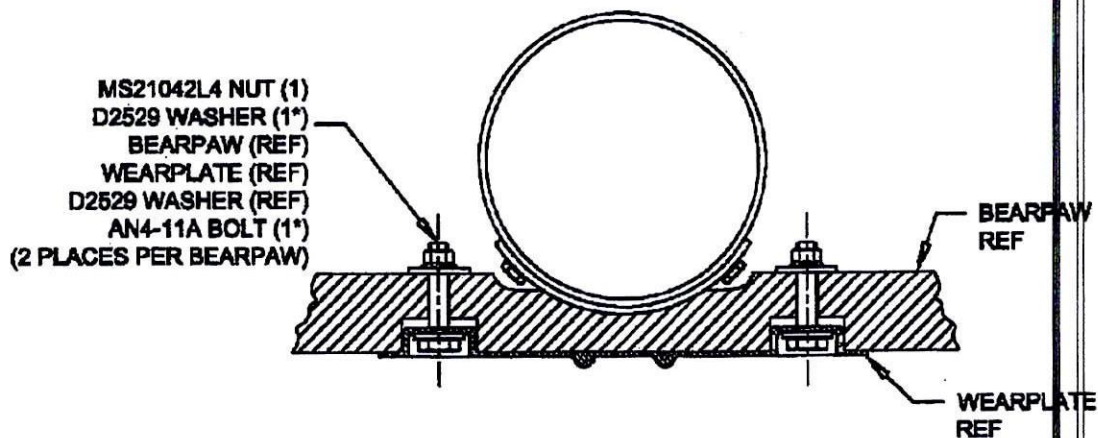
SIDE VIEW



BOTTOM VIEW

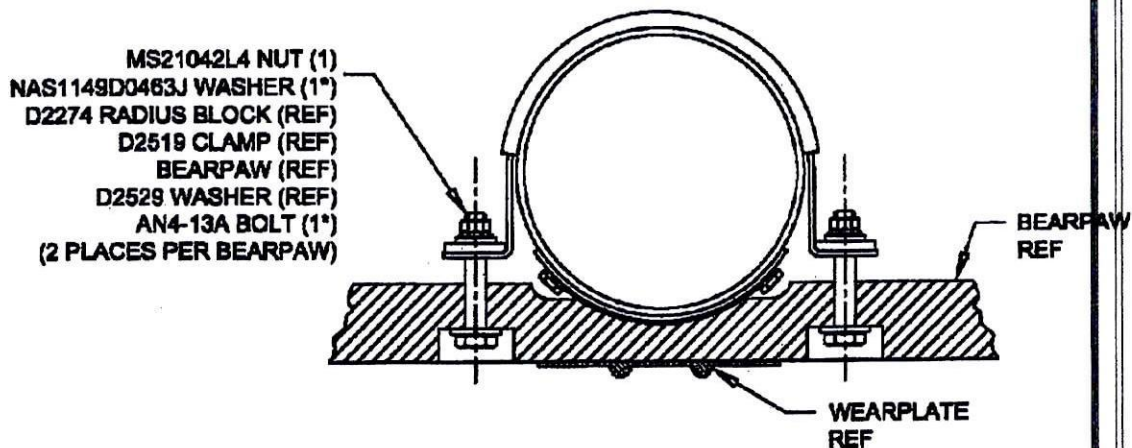
FIGURE 1: MODIFICATION OF D135-692-011 INSTALLATION
NOT TO SCALE

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MFG. APPR.	N/A	DSI 9750	SHEET 3 OF 5
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* ADDITIONAL NAS1149D0463J WASHERS MAY BE INSTALLED UNDER THE NUTS TO ENSURE 1.5-4 THREADS IN SAFETY ON THE BOLTS. IT IS ALSO ACCEPTABLE TO REPLACE THE AN4-11A BOLTS WITH LONGER OR SHORTER AN4 BOLTS, IF REQUIRED.

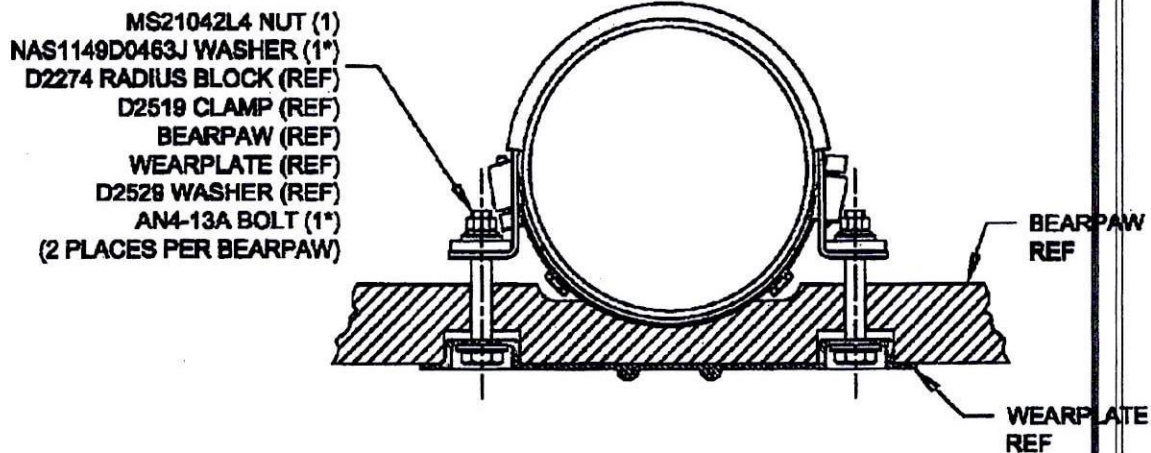
FIGURE 2: HARDWARE INSTALLATION AT AFT HOLE LOCATION
(WITH WEARPLATE, NOT TO SCALE)



* ADDITIONAL NAS1149D0463J WASHERS MAY BE INSTALLED UNDER THE NUTS TO ENSURE 1.5-4 THREADS IN SAFETY ON THE BOLTS. IT IS ALSO ACCEPTABLE TO REPLACE THE AN4-13A BOLTS WITH LONGER OR SHORTER AN4 BOLTS, IF REQUIRED.

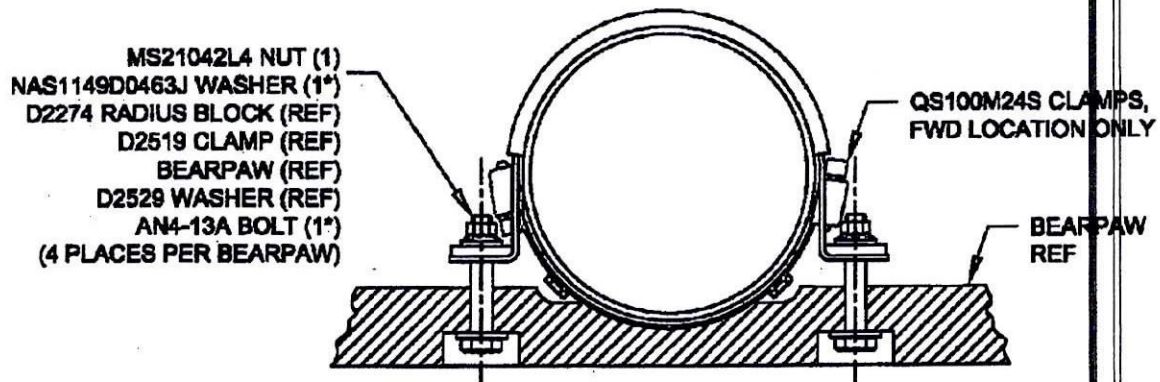
FIGURE 3: HARDWARE INSTALLATION AT MID HOLE LOCATION
(WITH WEARPLATE, NOT TO SCALE)

DESIGN	ML	DART AEROSPACE USA, INC. EUGENE, OR	
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CHECKED	<i>CH</i>	DRAWING NO.	REV. A
MFG. APPR.	N/A	DSI 9750	SHEET 4 OF 5
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	INSTALL MODIFICATION	NTS
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* ADDITIONAL NAS1149D0463J WASHERS MAY BE INSTALLED UNDER THE NUTS TO ENSURE 1.5-4 THREADS IN SAFETY ON THE BOLTS. IT IS ALSO ACCEPTABLE TO REPLACE THE AN4-13A BOLTS WITH LONGER OR SHORTER AN4 BOLTS, IF REQUIRED.

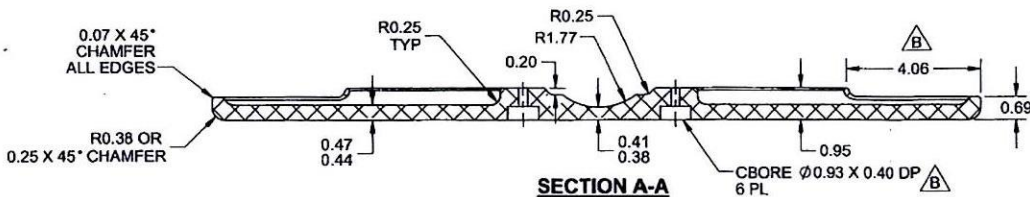
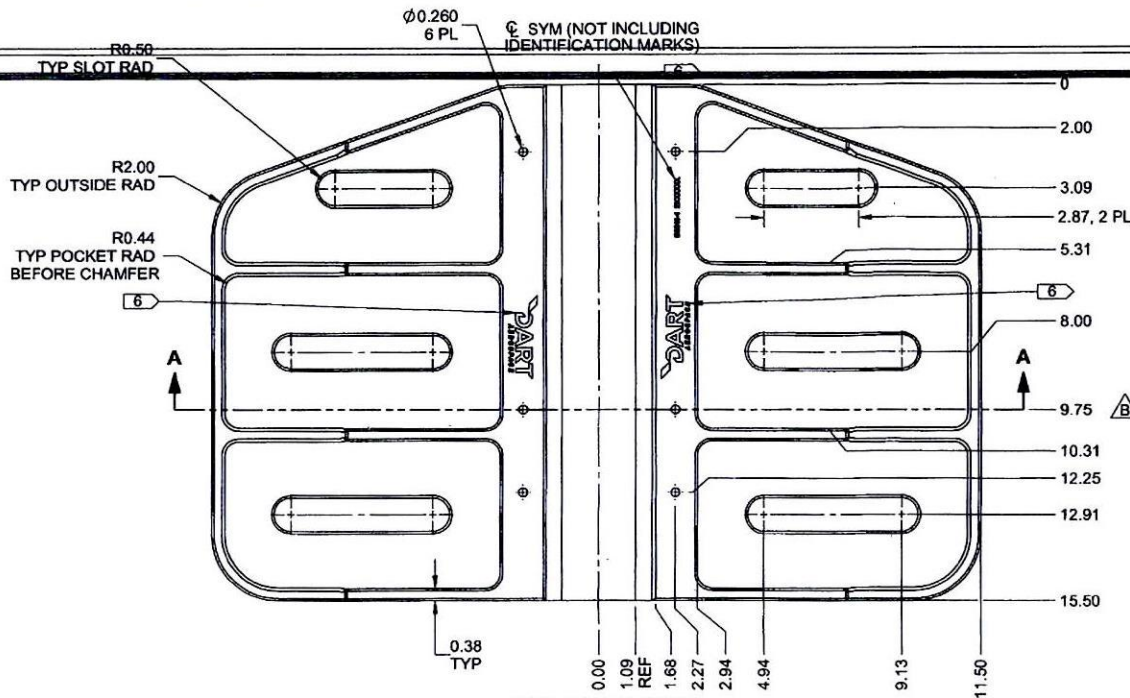
**FIGURE 4: HARDWARE INSTALLATION AT FWD HOLE LOCATION
 (WITH WEARPLATE, NOT TO SCALE)**



* ADDITIONAL NAS1149D0463J WASHERS MAY BE INSTALLED UNDER THE NUTS TO ENSURE 1.5-4 THREADS IN SAFETY ON THE BOLTS. IT IS ALSO ACCEPTABLE TO REPLACE THE AN4-13A BOLTS WITH LONGER OR SHORTER AN4 BOLTS, IF REQUIRED.

**FIGURE 5: HARDWARE INSTALLATION
 (WITHOUT WEARPLATE, NOT TO SCALE)**

DESIGN	ML	DART AEROSPACE USA, INC. EUGENE, OR	
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MFG. APPR.	N/A	DSI 9750	SHEET 5 OF 5
APPROVED	<i>[Signature]</i>	TITLE	SCALE
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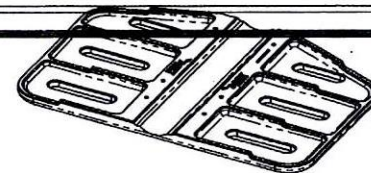
NOTES:

- 1) MATERIAL: UHMW BLACK TIVAR 1000 VIRGIN MATERIAL, 1.00 THICK MACHINED TO 0.95 (REF DART SPEC. MUHMWB10)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: ENGRAVE DART LOGO, PART NUMBER "D3049-1" AND BATCH NUMBER "BXXXXX" IN ACCORDANCE WITH QSI 044 METHOD 6.3 TO MAX DEPTH OF 0.012 AS ILLUSTRATED
- 7) WEIGHT: 5.94 lbs
- 8) NON DIMENSIONED FEATURES PER CAD FILE "D3049-1-REV.B.STP"

RELEASED
2016-07-26
ECN 16-591

APPROVED

B	REVISE DWG TO CURRENT STANDARDS, ADDED 2 ADDITIONAL CBORE HOLES 2X C6-1, UPDATE DIMS DUE TO CAD ERROR; Ø0.93 WAS Ø0.75	ML	16.06.01
A	NEW ISSUE	RF	01.10.18
REV.	DESCRIPTION	BY	DATE
DESIGN	ML	DART AEROSPACE USA, INC. EUGENE, OR	
DRAWN	ML		
CHECKED	DB	DRAWING NO.	REV. B
MFG. APPR.	JLM	D3049	SHEET 1 OF 1
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	BEARPAW	NTS
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REFERENCE ONLY

4. WEIGHT AND BALANCE

Installation	Weight	LATERAL		LONGITUDINAL	
		Arm	Moment	Arm	Moment
D135-692-011 <i>Bearpaw Installation</i>	11.8 lb 5.36 kg	0.0 in 0.0 m	0.0 in-lb 0.0 m-kg	199.7 in 5.07 m	2356 in-lb 27.2 m-kg
D135-692-041 <i>Wearplate Kit</i>	2.24 lb 1.0 kg	0.0 in 0.0 m	0.0 in-lb 0.0 m-kg	199.7 in 5.07 m	447 in-lb 5.1 m-kg
D135-692-011 <i>Bearpaw Installation, Aft Location</i>	11.8 lb 5.36 kg	0.0 in 0.0 m	0.0 in-lb 0.0 m-kg	201 in 5.10 m	2372 in-lb 27.3 m-kg
D135-692-041 <i>Wearplate Kit, Aft Location</i>	2.24 lb 1.0 kg	0.0 in 0.0 m	0.0 in-lb 0.0 m-kg	201 in 5.10 m	450 in-lb 5.1 m-kg

5. PARTS LIST

Qty -011	Qty -041	Part Number	Description
X		D135-692-011	BEARPAW INSTALLATION
	X	D135-692-041	WEARPLATE KIT
4		D2182B060	RUBBER CUSHION
8		D2274	RADIUS BLOCK
2		D3049-1	BEARPAW
8		D2529	WASHER
4		D2519	CLAMP
	2	D3719-041	WEARPLATE
8	8	AN4-13A	BOLT
8	8	NAS1149D0463J	WASHERS
8	8	MS21042L4	NUT (OR MS21042-4)
4		QS100M24S	CLAMP

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Revision: **B**

Date: 15.07.20